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THE ZOOLOGICAL RECORD

VOLUME 96 SECTION 8 1959

BRYOZOA (POLYZOA)

COMPILED BY

ANNA B. HASTINGS, M.A., Ph.D.

LONDON

PUBLISHED BY

THE ZOOLOGICAL SOCIETY OF LONDON

PRICE THREE SHILLINGS

1962



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Reproduction and settlement.—Reproductive periods and conditions for settlement of larvae, **Mature**; settlement, **Wisely**; factors (light, heat, mechanical, chemical) influencing development of colony, **Schneider**; experiments on choice of substratum by larvae, **Ryland** (1, 2); factors influencing metamorphosis, **Lynch** (1, 2); dormancy, and germination of statoblasts, **Oda**.

Development.—*Victorella sibogae*, **Braem**; *Cyphonautes* sp. in Ostsee, **Waldmann**.

Budding.—In *Membranipora membranacea* **Lutaud**.

Anatomy.—Of *Victorella sibogae* based on type-material, **Braem**.

Microstructure.—Skeletal, of *Trematopora*, **Boardman**; histological monograph of *Loxomespilon*, **Grujts-Faucher**; histological discrimination of two species, **Matricón**.

Zoarium.—Variation within colony and species statistically studied, **Ilies**; growth of colony of *Hippodiplosia foliacea*, **Nikolić** (2); astogeny of some fistuliporoid species, and relationship of genera, **Perry & Hattin**; stages of zoarial ontogeny (astogeny), **Voigt** (1).

Association.—With *Leptometra* (Crinoidea), **Gautier** (3); with Spionid inquilines, **Laubier** (2); of tube-living worms with Polyzoa, **Laubier** (1); close relation to host and inert nature of *Loxomespilon perezii*, **Grujts-Faucher**; commensals, enemies and parasites of freshwater Polyzoa, **Wiebach** (1); zoochlorellae in *Holoporella sardonica*,

Gautier (2) p. 140; *Hippodiplosia foliacea* as centre of an association, Nikolić (2).

Ecology.—Of Gulf Coast, U.S.A., Parker; fauna of a warm dock, Naylor; of sands and muds of Rhône Delta, Gautier (1); biocenosis of bottom with Ascidiaceans, Parenzan; quantitative study of Polyzoa on a coralligenous bottom with Gorgonia, Gautier (2).

Palaeoecology.—Of the "Hardgrounds" in the cretaceous, Voigt (4).

General biology.—Of *Orbitulipora*, Canu.

Fouling.—Nikolić (1); Of copper-sheathed hulls, Gopalakrishnan & Kelkar; factors influencing settlement of principal fouling organisms in Sydney Harbour, Wisely.

Aquaria.—Methods of laboratory culture, Schneider; popular article on freshwater aquarium, Keefe.

DISTRIBUTION

(a) RECENT

Marine and Brackish.—Ostsee, Schwarz; Waldmann; Britain, Naylor; France, Balavoine (1); Grujić-Faucher; Mediterranean, Gautier (1, 2, 3); Laubier (2); O'Donoghue & de Watteville; Parenzan; Egypt, Balavoine (2); Caspian Sea, Abricossow (4, 5); Zevina; Aral Sea, Abricossow (4); N. Carolina, U.S.A., Maturro; Gulf Coast, U.S.A., Parker; Gulf of Mexico, Parker & Curry; Gulf of California, Soule; Japan, Utinomi; Antarctic, Rogick (1, 2).

Freshwater.—Britain, Macan; S. Bavaria, Hoc; Hungary, Dudich & Kol; Sebestyén; Central Europe, Wiebach (2); Sumatra, Lacourt; U.S.A., Pennak.

(b) FOSSIL

Miocene.—Silesia, Malecki; Jugoslavia, Jovanović & Dolé; Portugal, Zbyszewski; Sakaraul'skogho horizon, U.S.S.R., Kharatishvili; Senegal, Abrard & Gorodiski; Jamaica, Lagaaij; Brazil, Barbosa (1, 2).

Oligocene.—Germany, Schürmann.

Eocene.—Florida, Voigt (1).

Cretaceous.—General, Voigt (2); Holland, Belgium, Germany, Voigt (3); Belgium, Holland, France, Denmark, Poland, Voigt (4); Belgium, Voigt (1); France, Roubichou; Thiele; Gulf Coast U.S.A., Butler & Cheetham.

Upper Palaeozoic.—Bashkirian Urals, Trizna.

Permian.—Vestspitsbergen, Forbes, Harland & Hughes; N.E. of U.S.S.R., Kashirtsev; Urals U.S.S.R., Nikiforova (3); W. Australia, Dickens & Thomas; Kansas U.S.A., Richards.

Carboniferous.—Hungary, Kolosváry; Donetz Basin U.S.S.R., Nikiforova (1, 2); Podmoskovnoy U.S.S.R., Shishova; Urals U.S.S.R., Nikiforova (3); Moscow syncline U.S.S.R., Shulga-Nesterenko (1); Turkestan, Nikiforova (4); Kansas U.S.A., Richards; Montana U.S.A., Perry & Gutschick; Nebraska U.S.A., Burckle (1).

Devonian.—Kuznet'sk Basin, Morozova (3, 4); Kuznet'sk and Minusins U.S.S.R., Morozova (1, 2); S.W. Ontario, Stumm & Wright.

Silurian.—Central and W. Tuva, Astrova (2); Podolia U.S.S.R., Astrova & Zhuravleva; U.S.A., Boardman.

Ordovician.—Esthonia, Männil; Podolia U.S.S.R., Astrova & Zhuravleva; Ontario Canada, Colquhoun.

III. SYSTEMATIC INDEX

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Paludicella articulata, Pennak p. 266; Sebestyén pp. 3, 8; Wiebach (2) p. 25.

†*Rhopalonaria attenuata*, Hücke p. 58.

Sundanella gen. n. for *Victorella sibogae*, Braem p. 278.

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†*Actinopora rugosa*, Malecki p. 186.

†*Altshedata* gen. n. Ceramoporidae p. 7, type-species *Fistulipora belgaschensis* Nekhoroshev p. 8, Morozova (2).

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†*Crisulipora occidentalis*, Lagaaij p. 484.

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†*Cystiramus* gen. n. *Fistuliporidae* p. 79, type-species *C. kondomensis* sp. n. Devonian Kuznet'sk Basin p. 80, Morozova (4).

†*Diaperocia rugulosa*, Malecki p. 187.

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†*Dybowskiella lebedevi* sp. n. Carboniferous U.S.S.R., Nikiforova (1) pp. 255, 262.—*D.* p. 1045, *brownportensis* sp. n. Silurian Tennessee U.S.A., p. 1047, Perry & Hattin.—*D. stipitata, regularis* spp. n. Pennsylvanian Montana U.S.A., Perry & Gutschick p. 316.

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†*Eofistulotrypa* gen. n. *Fistuliporidae*, type-species *E. manifesta* sp. n. Devonian U.S.S.R., Morozova (2) p. 9.

†*Fasciculipora prolifera*, Hücke p. 58.

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†*Hederella minusinsensis* sp. n. Devonian U.S.S.R., Morozova (2) p. 10.

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†*Idmonea atlantica*, Malecki p. 188.

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†*Oncousocia varians*, Malecki p. 185.

†*Ouletopora houzeaui*, Voigt (4) pl. 17 fig. 5.

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†*Amplexoporella* gen. n. Amplexoporidae p. 9, type-species *A. ornamentata* sp. n. Devonian U.S.S.R. p. 10, Morozova (1).

†*Amplexoporidae*, Astrova (2) p. 32.

†*Atactoporella depressa*, Astrova (2) p. 31.

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†*Batostoma microcellata* sp. n. Silurian U.S.S.R. p. 50, *densitabulata* sp. n. Silurian U.S.S.R. p. 52, Astrova (2).

†*Batostomella concentrica* sp. n. Carboniferous U.S.S.R., Nikiforova (1) pp. 256, 263.—*B. ivanovi* sp. n. Carboniferous Turkestan, Nikiforova (4) pp. 13, 53.

†*Cyphotrypa* p. 55, *sphaerica* sp. n. Silurian U.S.S.R., p. 56, Astrova (2).—*C. definita* sp. n. Devonian U.S.S.R., Morozova (1) p. 8.

†*Diplotrypa neglectiformis* sp. n. Silurian U.S.S.R., Astrova (2) p. 26.

†*Discotrypina* gen. n. Amplexoporidae type-species *D. hemiphragmis* sp. n. Silurian U.S.S.R. p. 37, Astrova (2).

†*Dyscritella granulata*, Kashirtzev p. 29.

†*Eridotrypella multa* sp. n. Devonian U.S.S.R., Morozova (1) p. 9.

†*Erydopora macrostoma*, Nikiforova (1) p. 256.

†*Hallopora viatrix* sp. n. Silurian U.S.S.R., Astrova (2) p. 27.

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†*Heterotrypidae*, Astrova (2) p. 39.

†*Leptotrypella aperta* sp. n. Devonian U.S.S.R., Morozova (1) p. 7.

†*Lioclema varium* sp. n. Silurian U.S.S.R. p. 43, *maslovi* sp. n. Silurian U.S.S.R. p. 45, *tapsaensis* sp. n. Silurian U.S.S.R. p. 46, *tuvaensis* sp. n. Silurian U.S.S.R., *irinae* sp. n. Silurian U.S.S.R. p. 48, *perezigium* sp. n. Silurian U.S.S.R. p. 49, Astrova (2).

†*Mesotrypella* gen. n. Halloporidae p. 29, type-species *M. alashensis* sp. n. Silurian U.S.S.R. p. 30, Astrova (2).

†*Monotrypa amplexiformis* sp. n. Silurian U.S.S.R. p. 33, *kisildzharensis* sp. n. Silurian U.S.S.R. p. 34, *psuedopediculata* sp. n. Silurian U.S.S.R. p. 35, Astrova (2).

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†*Monticuliporidae*, Astrova (2) p. 31.

†*Petalotrypa kossmati* sp. n. Carboniferous Turkestan, Nikiforova (4) pp. 6, 50.

†*Rhombotrypella* gen. n. Batostomellidae type-species *R. astragaloides* sp. n. Carboniferous U.S.S.R. p. 9, *simplex* sp. n. Carboniferous U.S.S.R. p. 10, Nikiforova (2).—*R. rectangulata*, Shulga-Nesterenko (1) p. 297.

†*Stenophragmidium* p. 319, *obscurum*, *megistum* spp. n. Pennsylvanian Montana U.S.A. p. 320, Perry & Gutschick.

†*Stenopora parasitica* sp. n. Carboniferous U.S.S.R. pp. 253, 261, conf. *tuberculata* p. 254, Nikiforova (1).

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†*Stigmatella indefinita* sp. n. Silurian U.S.S.R., Astrova (2) p. 42.

†*Tabulipora minima* var. *bormatica* var. n. Carboniferous U.S.S.R. p. 4, *beratica* sp. n. Carboniferous U.S.S.R. p. 6, *acrescens* sp. n. Carboniferous U.S.S.R. p. 7, Nikiforova (2).—*Tabulipora* type-species *T. scotica* Lee = *T. urei* Young p. 11, *sibilica* sp. n. Carboniferous Turkestan pp. 12, 52, Nikiforova (4).—*T. amadenensis* sp. n. Pennsylvanian Montana U.S.A. p. 317, *pachymuralis*, *maculata* spp. n. Pennsylvanian Montana U.S.A. p. 318, Perry & Gutschick.

†*Tabuliporella* gen. n. Batostomellidae pp. 7, 51, type-species *T. nalikinski* sp. n. Carboniferous Turkestan pp. 8, 51, *badamica* sp. n. Carboniferous Turkestan pp. 10, 52, *badamica* var. *tuberculata* var. n. Carboniferous Turkestan pp. 11, 52, Nikiforova (4).

†*Trematopora ondumensis* sp. n. Silurian U.S.S.R. p. 53, *beikhemensis* sp. n. Silurian U.S.S.R. p. 54, Astrova (2).—*T.* revised p. 1, *T. tuberculosa* type species p. 7, *T. halli*, *whitfieldi* retained in genus, *calloporoides*, *cyclata*, *debilis*, *kukersiana*, *primigenia*, *primigenia* var. *ornata* rejected p. 6, Boardman.

†*Trematoporidae*, Astrova (2) p. 50.

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†*Acanthocladia anceps*, Hucks p. 59.

†*Acanthocladidae*, Astrova (2) p. 60.

†*Aluverina* gen. n. Phylloporinidae p. 333, type-species *A. multiporata* sp. n. Ordovician Esthonia p. 334, Männil.

†*Archimedes bolkhovitinovae*, Shulga-Nesterenko (2) p. 316.

†*Clathropora? baltica* sp. n. Ordovician Esthonia, Männil p. 343.

†*Coscinotrypa pluscula*, Kashirtzev p. 29.

†*Cystodictya* sp. ex gr. *americana* p. 39, *dichotoma* sp. n. Carboniferous Turkestan pp. 40, 57, Nikiforova (4).

†*Dichotrypa tiberica* sp. n. p. 42, *D. tiberica* var. *ramosa* var. n. Carboniferous Turkestan pp. 42, 58, cf. *flabellum* p. 43, Nikiforova (4).

†*Ennalloporella opiki* sp. n. p. 331, *alliku* sp. n. p. 332, *moe* sp. n. p. 333, Ordovician Esthonia, Männil.

†*Fenestella* sp., Shulga-Nesterenko (1) pp. 296, 300.—*F. popovi*, *zavodovskyi*, *foraminosa* var. *gijigensis* p. 25, *tortuosa*, *neoforaminosa* p. 26, *foraminosa*, *basileensis*, *basileensis* var. *magna* p. 27, Kashirtzev.—*F. retiformis*

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†*Fenestellidae*, tabulation of species, pp. 60–69, footnote p. 54, *Nikiforova* (4).

†*Goniocladia* aff. *stepanovi*, *Goniocladia* sp., *Nikiforova* (4) p. 21.—*G. stepanovi* sp. n. Carboniferous U.S.S.R., *Nikiforova* (1) pp. 252, 261.

†*Graptodictya* (*Gorgonia*) *proavus* type-species of *Proavella*, *G. obliqua* referred to *Proavella*, Männil p. 345.

†*Hemitrypa* *proutana*, aff. *burulica* p. 30, *composita* sp. n. Carboniferous U.S.S.R. pp. 31, 55, *Nikiforova* (4).

†*Hypasomopora* p. 38, *mukhini* sp. n. Carboniferous U.S.S.R. pp. 39, 57, *Nikiforova* (4).

†*Oanduela* gen. n. Ptilodictyidae type-species *O. bassleri* sp. n. p. 340, *antiqua* sp. n. p. 341, Ordovician Esthonia, Männil.

†*Penniretepora* p. 16, *volgensis*, *monoseriata* spp. n. Carboniferous U.S.S.R. p. 17, tabulation of species p. 18, *Shishova*.—*P. silurica* (as *Penniretepora* on p. 13), *Astrova* (2) p. 61.—*P. curvula* sp. n. Carboniferous Kansas U.S.A. p. 1115, *flexistriata*, *nodocarinata* spp. n. Carboniferous and Permian Kansas U.S.A. p. 1116, *nodolineata* sp. n. *pustulosa* subsp. *kansasensis* subsp. n. Carboniferous and Permian Kansas p. 1118, *Richards*.

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†*Pinnatopora* cf. *flexicarinata*, *Nikiforova* (4) p. 33.—*P. lineata* sp. n. Carboniferous U.S.S.R., *Nikiforova* (2) p. 21.

†*Polypora* *mcnairi* nom. n. for *P. bassleri* McNair procc., *Burek* p. 701.—*P. evidens*, *P. cf. consanguinea* p. 28, *recedata* var. *grandicelata* p. 29, *Kashirtzev*.—*P. varsoviensis* var. *belianskensis* var. n. Carboniferous U.S.S.R. p. 20, *cestriensis* var. *kassimoviensis* var. n. Carboniferous U.S.S.R. p. 21, *Nikiforova* (2).—*P. aff. biseriata* p. 24, *spinulifera* p. 25, cf. *liniensis*, *varsoviensis* p. 26, *maccoganiformis* sp. n. Carboniferous U.S.S.R. pp. 27, 55, aff. *simulatrix*, *sibirica* p. 28, *Nikiforova* (4).—

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†*Pteropora* transferred to Ptilodictyidae, *P. pennula*, Männil p. 344.

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†*Ptilopora* sp., *Nikiforova* (4) p. 37.

†*Reteporina* *turkestanica*, *Nikiforova* (4) p. 23.

†*Rhabdomeson* *gracile* var. *sayramicum* var. n. Carboniferous U.S.S.R., *Nikiforova* (4) pp. 37, 56.

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†*Septopora* p. 33, cf. *cestriensis*, *weberi* p. 34, aff. *biserialis-nervata* p. 35, *Septopora* sp. p. 36, *Nikiforova* (4).

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